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# FRBSF WEEKLY LETTER

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## Deficits and Financial Change in the Pacific Basin

Government budget positions in most Pacific Basin nations deteriorated sharply in the aftermath of the worldwide economic slump of the mid-1970s. Budget deficits in the market-oriented economies of the region have since averaged roughly 4 percent of their respective GNPs. Financing shortfalls of this magnitude has not proven an easy task, and, at various times, has been responsible for inflation, disintermediation, and competitive shifts among financial institutions.

This *Letter* explains how the need to finance large deficits oftentimes has produced the problems mentioned, and argues that the responses of the market and financial regulatory authorities have constituted an important, although frequently inadvertent, impetus to financial innovation and liberalization in a number of Pacific Basin nations.

### Financing options

Governments have a number of options in financing budget deficits. At the most fundamental level, fiscal authorities must choose between borrowing abroad (i.e., from foreign investors, foreign banks, or international agencies) and borrowing from domestic sources. Foreign loans represent a major funding source for a number of Pacific Basin nations. Indonesia, for example, finances virtually all of its budget deficits abroad. But this *Letter* will concentrate on domestic financing and its relation to financial innovation.

When a government chooses to finance deficits domestically, it has several options: it can sell its debt to the central bank ("monetize" the deficit), it can persuade or require financial institutions to absorb government debt (turning the institutions into "captive" sources of funds), or it can design a "market oriented" approach to selling government debt instruments.

### Monetary finance

Use of the central bank to finance deficits involves increasing bank reserves, which in turn leads to increases in the stock of money. Ultimately, the private sector finances the budget deficit by increasing its holdings of non-interest bearing

claims — typically consisting of currency and bank reserves or "base money" — on the central bank at the expense of interest-bearing claims directly issued by the government. All countries in the Pacific Basin region have at different times monetized varying portions of their deficits.

The major drawbacks to financing sizable deficits through base money creation, of course, are its inflationary consequences for the economy. Among these consequences are distortions in the financial sector. The specific regulatory environment, including the structure of interest rate controls, determines the extent to which these distortions adversely affect the entire financial system, financial intermediaries as a group, or various groups of specialized financial institutions within the financial system. For example, deposit interest rate ceilings existing in most Pacific Basin countries are more likely to hold yields at regulated depository institutions below market-determined returns during periods of high inflation, and therefore cause financial disintermediation. Investors in these circumstances turn to such alternatives as investments in real assets and unregulated financial instruments.

Regulated institutions faced with a deteriorating competitive position may respond by designing new financial instruments offering market yields in an attempt to circumvent interest rate controls. Unregulated institutions may react by offering new instruments designed to maximize the opportunities available from their newly found competitive advantage. Financial authorities also are likely to respond at some point out of concern for the adverse effects of disintermediation on monetary control and the continued stability of the banking system. Segments of the financial sector that do not benefit immediately from ongoing changes will very likely lobby for a return to their former competitive position. In the end, the authorities have a number of choices: seek alternative means of financing deficits, liberalize the structure of interest rate controls or, in contrast, tighten and extend interest rate controls to cover virtually all financial institutions and markets.

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New Zealand is a prime example of a country where borrowing from the central bank has often been the "residual" form of deficit financing, i.e., the authorities have usually resorted to monetizing its debt when other forms of borrowing, such as below-market pricing in government debt instruments, have yielded insufficient funds. Problems with monetary control have followed. In most years since 1975, the state of the budget has been the largest influence on monetary growth. Consequent high and rising inflation, associated with "low" interest rate policies and the government's large credit demands, combined with disintermediation from the heavily regulated financial industry, have been primary reasons for the authorities to liberalize interest rate controls. They have been major factors behind New Zealand's bouts with financial market liberalization in 1976 and again during the past few months.

## Captive institutions

The "captive" placement of government debt involves some form of "persuasion" or coercion by government to induce private financial institutions to absorb government paper into their portfolios, or some formal or informal agreement on the part of government-affiliated financial institutions to purchase given amounts of government liabilities.

For example, commercial banks and other financial institutions in many Pacific Basin countries are required to hold "secondary" reserves and/or a certain portion of their portfolios in "liquid" assets. Government bonds or Treasury bills often satisfy this requirement. A less subtle, although common, method is simply to require individual financial institutions to absorb a given amount of government debt. Similarly, government-affiliated financial institutions are often legislated to hold a major portion, and, in some cases, all of their assets in government liabilities. For example, government pension systems in Malaysia and Singapore are required to hold a significant portion of their portfolios in government bonds.

Using captive financial institutions to absorb government debt has the advantage of lowering the cost to the government of servicing its debt. Moreover, most Pacific Basin nations feel that they have no domestic option other than monetizing their debt. Their open securities markets are typically underdeveloped or nonexistent. Instead, a few fi-

nancial institutions, usually commercial banks, dominate most forms of internal finance.

One disadvantage of captive finance is that the institutions forced to absorb relatively large amounts of government debt at below-market interest rates are likely to be put at a competitive disadvantage relative to "non-captive" institutions. Resulting competitive shifts between institutions, or between the regulated and unregulated financial sectors, are likely to create pressures for financial and regulatory changes. The authorities could feel compelled to tighten and extend controls over the financial sector to maintain the competitive position of captive institutions or perhaps even to keep them solvent. However, the authorities may also opt to lessen the burden on captive institutions and resort to other financing channels.

Japan provides a good example of this process. Historically, it has relied to a large extent on captive institutions to finance government deficits. When long-term "deficit finance" bonds were first issued in 1975, 93 percent of the total was underwritten at below-market rates by a syndicate consisting primarily of the largest banks. To help stem the rising concentration of government debt in their asset portfolios, the Ministry of Finance eventually allowed syndicate members to sell government bonds to the secondary market after the initial holding period had expired. The secondary market in government bonds subsequently developed rapidly, and often offered yields far exceeding those offered by the banks on regulated deposits. The result was a shift in the flows of funds from banks and other financial intermediaries to long-term government bonds and securities dealers.

The Japanese authorities responded to the declining market share of banks by allowing them to issue large denomination certificates of deposit (CDs) to attract business funds. (The Japanese authorities also were acting in response to pressure to eliminate discrimination against foreign banks. By opening the CD market in 1979, they substantially improved these banks' access to yen funds.) Japanese authorities also have attempted to reduce the burden on banks by raising the yields on primary government securities to levels that more fully reflect market-determined yields and by allowing more frequent changes in bank lending rates. Moreover, banks have responded to the increased competition for funds by offering "general accounts" to individuals. These accounts operate

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as demand deposits in that they can be overdrawn using time deposits as collateral. Thus, time deposits yielding higher interest rates than those available (set by regulators at low levels) on demand deposits are operating as transactions accounts.

### **Market finance**

In contrast to finance by captive institutions, the distinguishing characteristic of a market-oriented approach is that private individuals and institutions, and public institutions behaving in a manner similar to private financial institutions, voluntarily hold government debt. Thus, a necessary precondition for "market" placement is a structure of interest rates on government debt instruments that is competitive with alternative uses of funds.

A major advantage of following a market-oriented approach is that the government places itself on an equal footing with other borrowers in the credit markets. In this way, the government pays the cost of its borrowing—the yield that society could have earned by placing the funds in alternative investments. One political disadvantage, of course, is that the cost of government borrowing is not disguised as it is through captive financing or monetization. Moreover, even a market-oriented approach to government deficit financing is likely ultimately to create tensions in the financial system and spur further financial change.

Several Pacific Basin governments have tried to enhance the marketability of their debts by offering competitive interest rates and by introducing attractive new types of financial instruments. Malaysia, Thailand, and New Zealand have offered bonds at various times that are indexed to inflation, that are small in denomination, that have relatively short maturities, that feature variable interest rate yields, and that offer the possibility of early redemption.

The offshoot in some instances has been greater interest rate flexibility, i.e. more frequent changes in interest rates in response to market conditions, and more competitive pricing of investment instruments by the private sector as it competes with the government for funds. Thai authorities, for

example, have in recent years tried to increase the attractiveness of government securities to the non-bank private sector in a variety of ways. These include allowing more frequent changes in bank deposit and lending rates and paying yields on government bonds that more closely approach free market rates. The result has been the availability of a greater number of financial instruments with market rates of interest to Thai investors. In addition, the desire of Thai authorities to help increase the liquidity of government bonds held by commercial banks and other financial institutions led them to establish a government bond repurchase market.

Although many Pacific Basin governments have gradually or, in the recent case of New Zealand, quite rapidly moved to more market-oriented approaches to financing deficits, these approaches are likely to generate pressures for further financial change. This is particularly true where some interest rate ceilings and credit controls remain in effect. Securities companies in Japan, for example, took advantage of the development of secondary government bond markets and their regulatory competitive advantage over banks by offering investment trust funds backed by government bonds bearing market rates of interest. Their innovation took funds away from banks bound by deposit rate ceilings and created another source of tension in the financial system. This tension eventually could lead authorities to allow greater deposit interest rate flexibility.

### **Conclusion**

Financing deficits domestically is likely to distort the financial system to the extent that financial regulations and controls are binding regardless of the channel through which deficits are financed. The experiences of several Pacific Basin nations suggest that these pressures are likely to be met both by financial innovation to circumvent binding controls and by regulatory changes designed to redress competitive imbalances caused in the process. In sum, financing large deficits is one inadvertent force moving a number of Pacific Basin nations to a more liberal and competitive financial environment.

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Opinions expressed in this newsletter do not necessarily reflect the views of the management of the Federal Reserve Bank of San Francisco, or of the Board of Governors of the Federal Reserve System.

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**BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT**  
 (Dollar amounts in millions)

Selected Assets and Liabilities Large Commercial Banks	Amount Outstanding	Change from	Change from 12/28/83	
	12/19/84	12/12/84	Dollar	Percent <sup>7</sup>
Loans, Leases and Investments <sup>1 2</sup>	188,356	253	12,331	7.1
Loans and Leases <sup>1 6</sup>	169,949	420	14,594	9.5
Commercial and Industrial	52,981	- 130	7,018	15.5
Real estate	61,887	244	2,988	5.1
Loans to Individuals	31,780	364	5,129	19.6
Leases	5,079	0	16	0.3
U.S. Treasury and Agency Securities <sup>2</sup>	11,347	- 177	- 1,160	- 9.4
Other Securities <sup>2</sup>	7,060	10	- 1,103	- 13.7
Total Deposits	194,368	1,999	3,371	1.7
Demand Deposits	46,289	1,336	- 2,948	- 6.1
Demand Deposits Adjusted <sup>3</sup>	30,138	695	- 1,193	- 3.8
Other Transaction Balances <sup>4</sup>	12,635	- 33	- 140	- 1.1
Total Non-Transaction Balances <sup>6</sup>	135,444	696	6,459	5.1
Money Market Deposit Accounts—Total	41,091	406	1,494	3.8
Time Deposits in Amounts of \$100,000 or more	41,010	342	2,845	7.6
Other Liabilities for Borrowed Money <sup>5</sup>	22,458	797	- 549	- 2.4
<b>Two Week Averages of Daily Figures</b>	Period ended 12/17/84	Period ended 12/03/84		
<b>Reserve Position, All Reporting Banks</b>				
Excess Reserves (+)/Deficiency (-)	40	65		
Borrowings	44	51		
Net free reserves (+)/Net borrowed(-)	- 3	13		

<sup>1</sup> Includes loss reserves, unearned income, excludes interbank loans

<sup>2</sup> Excludes trading account securities

<sup>3</sup> Excludes U.S. government and depository institution deposits and cash items

<sup>4</sup> ATS, NOW, Super NOW and savings accounts with telephone transfers

<sup>5</sup> Includes borrowing via FRB, TT&L notes, Fed Funds, RPs and other sources

<sup>6</sup> Includes items not shown separately

<sup>7</sup> Annualized percent change